AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of manufacturing a liquid crystal display device, comprising:

forming a switching element on a substrate;

forming a passivation layer over the substrate;

depositing a metal layer on the passivation layer;

forming a photoresist pattern on a surface of the metal layer, such that a portion of the metal layer is exposed;

treating the exposed portion of said metal layer with a first plasma, prior to any step of etching said photoresist pattern, and prior to any step of etching said metal layer, ~~using the photoresist pattern as a mask,~~ to lower an internal binding force in the exposed portion of said metal layer to increase a subsequent etch rate of said metal layer; and

etching the treated portion of said metal layer to form a pixel electrode.

2. (Original) The method of claim 1, wherein the switching element is a thin film transistor.

3. (Original) The method of claim 1, wherein the step of treating the exposed portion of the metal layer includes,

using a reactive gas to lower a binding force in the exposed portion.

4. (Original) The method of claim 3, wherein the reactive gas includes H_2 plasma gas.

5. (Original) The method of claim 1, wherein the step of treating the exposed portion of the metal layer includes,

using a non-reactive gas to lower a binding force in the exposed portion.

6. (Original) The method of claim 5, wherein the non-reactive gas includes Ar or N_2 plasma gas.

7. (Original) The method of claim 1, wherein the step of etching the metal layer involves a dry-etching technique.

8. (Original) The method of claim 7, wherein the step of etching the metal layer includes,

etching the metal layer with HBr plasma gas.

9. (Original) The method of claim 7, wherein the step of etching the metal layer includes,

etching the metal layer with a composition of HBr plasma gas and Cl_2 plasma gas.

10. (Original) The method of claim 7, wherein the step of etching the metal layer includes,

etching the metal layer with a composition of HBr plasma gas and CH_4 plasma gas.

11. (Original) The method of claim 1, wherein the metal layer includes one of indium tin oxide (ITO) and indium zinc oxide (IZO).

12. (Cancelled)

13. (Previously Presented) The method of claim 30, wherein the first gas is a reactive gas.

14. (Original) The method of claim 13, wherein the reactive gas includes H_2 plasma gas.

15. (Previously Presented) The method of claim 30, wherein the first gas is a non-reactive gas.

16. (Original) The method of claim 15, wherein the non-reactive gas includes Ar or N_2 plasma gas.

17. (Previously Presented) The method of claim 30, wherein the at least one second gas includes HBr plasma gas.

18. (Previously Presented) The method of claim 30, wherein the at least one second gas includes a composition of HBr plasma gas and Cl_2 plasma gas.

19. (Previously Presented) The method of claim 30, wherein the at least one second gas the at least one second gas includes a composition of HBr plasma gas and CH_4 plasma gas.

20. (Previously Presented) The method of claim 30, wherein the metal layer includes one of indium tin oxide (ITO) and indium zinc oxide (IZO).

21. (Previously Presented) The method of claim 30, further comprising:

removing the photoresist pattern from the pixel electrode.

22. (Currently Amended) A method of patterning a metal layer, comprising:

depositing a metal layer over a substrate;

forming a mask on a surface of the metal layer, leaving a portion of the metal layer uncovered;

exposing the uncovered portion of said metal layer to a first plasma, ~~prior to any step of etching said mask, and~~ prior to any step of etching said metal layer, to lower an internal binding force in the uncovered portion to increase a subsequent etch rate of said metal layer; and

etching the uncovered portion of said metal layer with a second plasma to form a metal pattern.

23. (Original) The method of claim 22, wherein the first plasma includes H_2 plasma gas.

24. (Original) The method of claim 22, wherein the first plasma includes Ar or N_2 plasma gas.

25. (Original) The method of claim 22, wherein the second plasma includes HBr plasma gas.

26. (Original) The method of claim 22, wherein the second plasma includes a composition of HBr plasma gas and Cl_2 plasma gas.

27. (Original) The method of claim 22, wherein the second plasma includes a composition of HBr plasma gas and CH_4 plasma gas.

28. (Original) The method of claim 22, wherein the metal layer includes one of indium tin oxide (ITO) and indium zinc oxide (IZO).

29. (Original) The method of claim 22, wherein the metal pattern includes a pixel electrode of a display device.

30. (Currently Amended) A method of manufacturing a pixel electrode in a liquid crystal display device, comprising:

depositing a metal layer on a passivation layer which partially covers a transistor;

forming a photoresist pattern on a surface of the metal layer, leaving a portion of the metal layer uncovered;

exposing the uncovered portion of said metal layer to at least one first gas, prior to any step of etching said photoresist pattern and prior to any step

of etching said metal layer, to lower an internal binding force in the uncovered portion to increase a subsequent etch rate of said metal layer; and

etching the uncovered portion of said metal layer with at least one second gas to form a pixel electrode.

31. (Currently Amended) A method of manufacturing a pixel electrode in a liquid crystal display device, comprising:

depositing a metal layer on a passivation layer which partially covers a transistor;

forming a photoresist pattern on a surface of the metal layer, leaving a portion of the metal layer uncovered;

exposing the uncovered portion of said metal layer to at least one first gas, prior to any step of etching, to lower an internal binding force in the uncovered portion to increase a subsequent etch rate of said metal layer; and

etching the uncovered portion of said metal layer with at least one second gas to form a pixel electrode.